

CLAIMS

1. Coating blade for the application of coating color onto a travelling web, said blade having an edge section with a profile conformed to the surface of said web when in engagement therewith, characterized by a sacrificial layer covering at least said section and protecting the underlying edge section during the web loading phase.
- 10 2. Coating blade according to claim 1 for use in the application of an aqueous coating color, wherein said sacrificial layer is soluble in water and otherwise compatible with said coating color.
- 15 3. Coating blade according to claim 1 or 2, wherein said sacrificial layer is substantially non-hygroscopic.
4. Coating blade according to any one of the preceding claims, wherein said sacrificial layer is constituted by a material selected from water-soluble polymers and polysaccharides capable of forming a film.
- 20 5. Coating blade according to claim 4, wherein said material is selected from acrylic or methacrylic polymers and copolymers and their salts.
- 25 6. Coating blade according to claim 4, wherein said material is selected from anionic copolymers on the basis of Acrylic acid, Acrylic ester and Acrylonitrile.
7. Coating blade according to claim 4, wherein said material is selected from film-forming polysaccharides.
8. Coating blade according to claim 7, wherein said material is selected from hemi-celluloses, plant gums, cellulose and derivatives thereof, starch and derivatives thereof, microbial polysaccharides, algal polysaccharides, and chitosan and derivatives thereof.
- 30 9. Coating blade according to claim 8, wherein said material is selected from ethyl cellulose, hydroxyethyl cellulose and carboxymethyl cellulose.
- 35

10. Coating blade according to any one of the preceding claims selected from steel blades, hard-tipped blades, and soft tipped blades.

11. A method of preparing a coating blade for the 5 application of coating color onto a travelling web, said blade having an edge section with a profile conformed to the surface of said web when in engagement therewith, comprising the following steps:

10 a) preparing a solution containing a material capable of forming a film on evaporation of solvent;

b) applying said solution onto at least said section; and

c) allowing the applied solution to dry so as to form a solid film on at least said section.

15 12. A method according to claim 11, wherein step c) includes heating to an elevated temperature.

13. A method according to claim 11 or 12, wherein the solution is applied in several layers with intermediate heating between the application of each 20 layer.

14. A method according to any one of the claims 11 to 13, wherein under step a) an aqueous solution is prepared which contains a polysaccharide in a concentration of at most about 10% by weight.

25 15. A method according to claim 14, wherein said concentration is from about 1% to about 7% by weight.

16. A method according to any one of the claims 11 to 13 wherein under step a) an aqueous solution is prepared which contains an anionic copolymer on the basis 30 of acrylic acid, acrylic ester and acrylonitrile in a concentration of at most about 40% by weight.

17. A method according to claim 16, wherein said concentration is about 15% to about 30%.